Building Content Area Literacy Expertise among European Teachers of Secondary Schools

A Report about two European Comenius Projects

ABSTRACT

In 2011 / 2012 a European "Basic Curriculum for Teachers' In-Service Training in Content Area Literacy in Secondary Schools" (BaCuLit) has been developed in the course of a Comenius Multilateral Project which involved seven European countries representing the geographic, economic and socio-cultural diversity of Europe. The BaCuLit curriculum aims at providing secondary teachers of all school subjects ("content areas") with the necessary knowledge and skills to support their students in reading and writing to learn from disciplinary academic texts across the curriculum. The course consists of 6 modules comprising about 40 hours of in-service teacher training. It is available in English and 6 European languages and can be disseminated in other countries as well. In the subsequent Comenius Accompanying Measures Project ISIT ("Implementation Strategies for Innovations in Teachers' Professional Development", 2013-2015) the implementation opportunities of regular BaCuLit courses in teacher training institutions in three core-partner countries (Germany, Hungary, Romania) and five associated countries have been explored and analysed. More than 30 teacher trainers have been trained and certified as BaCuLit trainers by means of a Blended Learning Course and an International Summer School. These teacher trainers explored the opportunities of regular sustainable implementation of Content Area Literacy courses in their training institutions and documented the steps taken in an implementation logbook. Those logbooks were analysed by the trainers, the national ISIT staff(s) and the international partners in order to identify general opportunities and obstacles in implementing innovation (like the BaCuLit course) into teachers' professional development.

Keywords: *ELINET, ISIT, BaCuLit, content area literacy, teachers' professional development, blended learning*

AUTHOR



Christine Garbe, Prof. Dr. phil., studied German Literature, Social Sciences and Pedagogy and accomplished her qualification as grammar school teacher and her doctorate (PhD) in Berlin. From 1996 to 2010 she worked as Professor for German Literature and Literature Education at the University of Lueneburg, since 2010 she helds the chair for "Reading and Media Socialisation" at the University of Cologne. Garbe published numerous articles and books about gender and reading, reading socialisation, adolescent literacy, children and youth literature. Since 2006 she has coordinated major European projects about Struggling Adolescent Readers in Europe (ADORE), about Professional Development

of Teachers in Content Area Literacy (BaCuLit, ISIT) and for building up a European Literacy Policy Network (ELINET, see www.eli-net.eu).

Introduction and Background

"One in five 15-year-old Europeans, as well as nearly 75 million adults, lack basic reading and writing skills. Not only does this make it hard for them to find a job, but it also increases their risk of poverty and social exclusion, by limiting their opportunities for cultural participation, lifelong learning and personal growth. Literacy is fundamental to human development, as it enables people to live full and meaningful lives and contribute towards the enrichment of their communities." (ELINET Country Reports, Frame of Reference, May 2015, p. 5) This description of the literacy challenge which contemporary Europe faces is the starting point of research and policy activities of the *European Literacy Policy Network (ELINET)*, which started its work in February 2014.

This literacy challenge became more and more obvious in the new millennium, when the international literacy assessments (PISA, PIRLS and PIAAC) made the broader public aware of this problem. People disposing of reading skills which would have been sufficient in the 1950s are considered nowadays at risk not to meet the contemporary demands of the global post-industrial knowledge societies of the 21st century. These demands matter not only for academic careers but for all modern working environments in the digital world. American research on "workplace literacy" already found out in the 1980s that 70% of the texts which have to be dealt with at normal workplaces show a degree of difficulty which corresponds to that of the upper classes in high school (cf. Mikulecky & Drew, 1991). Therefore, it is required that all adolescents dispose of a high-quality basic standard of literacy skills at the end of compulsory schooling, in order to make a successful start into their training or job. The PISA Studies define this minimal standard as competence level 2 (out of originally 5 levels): Adolescents scoring on competence level 1 or below are consequently regarded as "low achievers", "poor" or "struggling" readers or "students at risk". In the EU, the number of these low achievers among the 15-year-olds tested by PISA has not considerably decreased since the first PISA study in 2000, where the average rate of low achievers for the participating EU countries was 21.3%. For this reason, the improvement of reading literacy of adolescents has been a major issue on the European educational agenda since the Education Benchmarks for Europe defined by the European Commission in 2004 (cf. Sulkunen, 2013).

In 2006, the European Commission launched a call within the Socrates Programme aiming at: "Better understanding of the phenomenon of poor reading and poor readers in order to better combat the problem." The ADORE project ("Teaching Adolescent Struggling Readers. A Comparative Study of Good Practices in European Countries") was funded by this programme and carried out from 2007 to 2009. Coordinated by Karl Holle, Swantje Weinhold and Christine Garbe at the University of Lueneburg, this project gathered 12 research and practice partner institutions of 11 European countries investigating good practice in reading instruction in all participating countries (by collecting data through on-site visits). During the 2-year investigation period, we have written down 30 case studies of schools with promising programmes and practices and finally identified 13 "key elements" of good practice on classroom, school, community and national levels concerning the improvement of reading instruction for adolescent struggling readers (see: Garbe et al., 2010a and the Executive Summary of the ADORE project on the website: www.adore-project.eu, to be found under "Downloads").

One of the main findings of our investigations was that the expertise of teachers to integrate literacy instruction continually in all their subject lessons is one of the most important key elements of good practice to help struggling readers. However, mathematics, history or science teachers in secondary schools are usually not prepared to teach literacy skills in their classrooms. Those subject teachers consider only the mother tongue teachers to be responsible for the reading and writing skills of their students - but we know from extensive research during the last decades, that this is a wrong concept. The idea that reading and writing skills have to be taught "across the curriculum", which means in all school subjects, is called "content area literacy" (CAL) in international research and education practice. In the United States, for example, research and development around content (area) literacy has a history of more than 100 years. Brozo (2014) refers to E.B. Huey (The Psychology and Pedagogy of Reading, 1908) as the first publication about content literacy; since the late 1960s (H.L. Herber, Teaching Reading in Content Areas, 1970) up to today there has been published extensive research and study books around CAL as well as nearly 20 national reports and position statements on adolescent literacy in the U.S. (see overview in W.G. Brozo, 2014).

The reading difficulties of adolescents in many European countries (and beyond) may to a considerable extent be caused by the lack of a systematic reading (and writing) instruction in secondary schools in all academic subjects. Researchers and reading educators recommend that understanding content area texts (or disciplinary texts) should be taught in all subjects and all class levels systematically. But in European countries, content area teachers are not trained to fulfil this task.

The BaCuLit Project

This was exactly the starting point of the BaCuLit project, funded by the Comenius Programme (Multilateral Projects) from January 2011 to December 2012 and has developed, implemented and evaluated a "Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools". For this purpose, 10 partners from universities and inservice teacher training institutions from 7 European countries cooperated in this project. The BaCuLit project has been coordinated by a German team: Christine Garbe, Martin Gross (Albertus Magnus University of Cologne), Karl Holle, Stephanie Schmill (Leuphana University), partner countries included Germany, Hungary, the Netherlands, Norway, Portugal, Romania and Sweden, who were supported and consulted by two American experts, William G. Brozo (George Mason University) and Carol M. Santa (Montana Academy).

The BaCuLit project focused on "reading skills": it wanted to extend secondary school teachers' expertise to improve their students' reading habits and comprehension strategies for diverse texts in all school subjects and to help them build a stable self-concept as

¹ The ADORE-findings were later on supported by the Final Report of the European High Level Group of Experts on Literacy, published in 2012 and containing, among others, age-specific recommendations for children, adolescents and adults. For adolescents, this report put on top of the agenda of its action plan the claim: "Make every teacher a teacher of literacy!" (HLG Final Report, 2012, p. 92)

readers and learners. The basic curriculum intends to define the minimal knowledge every secondary content area teacher in the EU should have about teaching literacy skills in all school subjects.

The BaCuLit project addressed decision makers in educational policy and in schools who were responsible for the training of secondary school teachers. Those teachers were considered to be the main target group who shall participate in the BaCuLit courses in order to improve their own instruction (as teachers will learn how to support their students by providing guided text comprehension) or to become future BaCuLit trainers themselves (multiplier approach). The ultimate target group, however, were the secondary students – struggling adolescent readers and writers – who will benefit from the increased expertise of their teachers. Furthermore, the project offers teacher training institutions and decision makers in educational policy a scientifically based and practically tested core curriculum for the education and training of teachers which will enable them to effectively support struggling students to improve in reading, writing and learning.

Project Design and Objectives

The BaCuLit project followed an ambitious work plan (consisting of three phases) during the 24 months of the funding period:

During the **Development Phase** (January to September 2011) the concept of the basic curriculum was decided (during the 1st Workshop in Nijmegen, Netherlands, in February 2011) and the work of developing all materials for the 6 modules was distributed. This phase ended with the 2nd Workshop in Braga, Portugal, in September 2011: here the pilot versions of the modules and the training concept were discussed and agreed upon. Results of the development phase were: structure and concept of the basic curriculum with 6 modules, including detailed work plans and corresponding materials (presentations, worksheets, background texts); a drafted teacher's workbook; a training concept ("guidelines for professional development of teachers") and the structure of the communication platform (Moodle).

During the Implementation Phase (October 2011 to July 2012) the pilot course was implemented in 7 teacher training institutions in 6 EU-countries: Germany, Hungary, Netherlands, Portugal, Romania (twice), and Sweden; Norway did not implement, as it disposed of a similar national programme already. The total scope of the pilot teaching was 36 hours (12 units of 3 hours or 6 units of 6 hours). Depending on national or local conditions, the units were taught flexibly. The content of this phase was the translation of the modules and the teachers' handbook into six national languages; the teaching of the pilot courses and their formative evaluation; the organisation of supporting visits during which tandem partners visited each other for one pilot module. Furthermore, the evaluation of the pilot courses involved not only trainers and participating teachers on a regular basis, but also external educational experts. Results of the implementation phase were six implemented

and evaluated modules, about 20 supported BaCuLit trainers and about 140 trained BaCuLit teachers in six countries.

During the **Dissemination Phase** (August to December 2012) the evaluation results of the implementation phase were analysed in the 3rd Workshop which took place in Cologne, Germany, in August 2012. On this basis further improvements of the curriculum and a modification of the basic model were discussed and agreed; the publication of BaCuLit results in English and in six national languages was prepared and a dissemination concept, standards for the qualification of BaCuLit-trainers and a sustainability concept were developed. During this workshop, the BaCuLit consortium founded an International BaCuLit Association which is now in charge of further developing the BaCuLit curriculum and defining quality standards of BaCuLit teachers and BaCuLit trainers by means of certification.

The general **project objective** – to develop, implement and evaluate a coherent, practicable and sustainable Basic Curriculum for Content Area Literacy, based on the current state of content area literacy research – was differentiated into four fields of work with specific objectives:

- concept, methods and materials: At the end of the project, six modules with PPT presentations and worksheets, integrated in a Teachers' Workbook, as well as all guiding materials for the teacher trainers have been produced: work plans for all course units, annotated PPT presentations, research background and scientific references integrated in the Trainers' Handbook. The latter is available only in English whereas all materials for the teachers are available in the English master version and in the national languages of the implementing partner countries (i.e. Dutch, German, Hungarian, Portuguese, Romanian and Swedish). The English master version is determined for being translated into further languages of European countries.
- Development of a sustainable concept for teacher training which closely links the new input to the daily classroom practice of the trained teachers: In most cases, teacher training is conducted as so called "one shot activity", which results in teachers having no support in implementing new methods or contents into their own classroom. In contrast, the BaCuLit project developed a concept, which focuses on changing the classroom practice of teachers as well as their self-concept as teachers not only of content but of content-related literacy skills. The main tools for this sustainable teacher training approach are a long-term input with at least 6 units of continuous professional development (PD), a Teachers' Workbook with assignments and materials to be used in teachers' daily practice and the use of a BaCuLit learning and communication platform (Moodle) that allows for the coaching of teachers by the national teacher trainers in the interim phases between the course units.
- Development of a Trainers' Handbook and a concept for training of the trainers:

 Regarding the originally planned multiplier concept, we made changes due to experiences with the pilot courses. It was planned that the most qualified teachers of the first trained cohort in all partner countries should become BaCuLit trainers in order to realise a

multiplier effect. This has proven not to be practicable in this direct way; instead experience has shown that the conditions for teachers' PD between the participating countries, partly even between the different federal states (e.g. in Germany), differ much more than we expected. Therefore we created the Trainers' Handbook (in English) that can be used to provide a compact PD training for teacher trainers in different countries, according to the conditions of the respective countries.

Sustainability: Building an organisational structure for a long-term implementation of BaCuLit within teachers' pre-service and in-service training: Accounting for the heterogeneous conditions of teachers' PD in Europe it is necessary to continuously update the BaCuLit curriculum and to flexibly adapt it to the national educational systems. During the last stage of the project an international BaCuLit Association has been founded, which, as a legal entity, takes over the intellectual property of BaCuLit and which is responsible for the further development and for national implementation strategies. The BaCuLit Association also defines quality standards and ensures them by awarding certificates for teachers and trainers (more information about the association can be found on the BaCuLit website: www.baculit.eu).

The Basic Curriculum and its Principles

The curriculum builds upon two interrelated results of international research in the field of content area teaching and learning:

- In the content areas, the students' appropriate dealing with subject specific texts is directly linked to successful content learning.
- Responsive teaching and metacognitive literacy discourses are directly linked to successful content instruction.

During the 3rd BaCuLit Workshop in Cologne the partners analysed the implementation and evaluation results of the pilot teaching of BaCuLit in 6 European countries (from November 2011 to June 2012). As a consequence the BaCuLit consortium agreed upon some modifications in the concept (framework) and the curriculum. This revision has been carried out in the final project phase (September – December 2012): The 6 modules were slightly modified in their content and structure and their timing became more flexible. Not every module is set to 6 hours, but some modules may be taught in 3 hours, while others rather require 8 or 9 hours. In addition, there are some optional contents that can be added or omitted depending on national circumstances. By this, the developing teams aimed at considering the fact that the implementation conditions in the participating (and in future participating) European countries vary widely, but can also vary within a country or even from school to school.

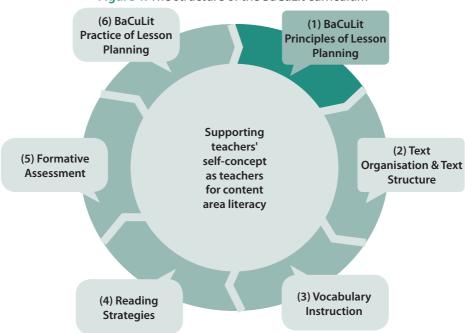


Figure 1. The structure of the BaCuLit curriculum

Figure 1 gives an overview of the BaCuLit curriculum as a whole with the main goal in the inner circle and the six modules located around it. The structure of the BaCuLit curriculum has been modelled in the form of a cycle – a reference to the ADORE-project and its main idea of the "ADORE reading instruction cycle". This cyclical teaching structure is used instead of the traditional sequentially organised lessons for theoretical reasons (cf. Garbe et al. 2010a, chapter 6.2). In the centre of the cycle the main goal of the curriculum is stated, which is to support teachers' self-concept as teachers not only of content learning, but also of literacy instruction within their content areas.

Modules 1 and 6 deal with lesson planning which is at the centre of the BaCuLit concept for putting instructional ideas into practice. Therefore the curriculum cycle starts and ends with this topic. In module 6, all participants are requested to present their own BaCuLit lesson plan (in their specific subject) which incorporates all the aspects they have learned during the course. Modules 2 to 4 deal with central aspects of literacy-related instruction in all school subjects: knowledge about the structure and diversity of texts, about the teaching of academic vocabulary and the teaching of reading strategies. Module 5 delivers knowledge about and tools for diagnostic / formative assessment, which should be applied at the beginning of every instruction unit, but may best be taught after the modules 1 to 4.

In detail:

Module 1: Lesson Planning I; General Principles. This module focuses on the basic ideas behind the BaCuLit curriculum. Central questions are: (1) Introduction: Why reading

matters in all school subjects? (2) What will participants learn during the BaCuLit-course? (Content and structure of the BaCuLit curriculum, underlying principles of professional development); (3) How are participants required to work during the BaCuLit-course? (Teacher's workbook, final assignment, requirements for BaCuLit teacher certificate; *optional*: Moodle platform); (4) BaCuLit framework for lesson planning: Why are the following cross-curricular concepts central for lesson-planning in the BaCuLit framework: (a) Metacognition & Literacy for Learning, (b) Interaction & Classroom Discourse, (c) Engagement & Empowerment? (5) What are the main questions when you plan a content lesson or unit?

Module 2: Text Diversity and Text Organisation. This module focuses on the diversity of content area texts and their role in fostering students' reading engagement. Main questions are: (1) Why and how to connect students' text worlds to the diversity of texts? (2) What are the advantages and disadvantages of using authentic texts in the classroom? (3) How and why to use content area structure and organisation for meaning making? (4) How are texts crafted to help students learn new content knowledge? (5) How can teachers own text materials guide their students' learning?

Module 3: Teaching Academic Vocabulary. This module focuses on how to identify and teach the essential content-specific vocabulary in order to facilitate students' content learning. Main questions are: (1) Why is vocabulary development crucial for content area literacy? (2) How can principles from vocabulary research guide classroom practice? (3) What are some guidelines for selecting words in the content areas that are worthy of rich instruction? (4) How can students develop their own student friendly definitions? (5) How can teachers help students expand their understanding of essential word meanings?

Module 4: Metacognition and Reading Strategies. This module focuses on teaching cognitive and metacognitive reading comprehension strategies students can use for reading content area texts. Main questions are: (1) What are reading strategies and how should they be taught? (2) How can teachers become aware of their own strategy use and gain an insight into their students' strategies? (3) How does a cognitive apprenticeship approach bring about a shift of responsibility for strategy use from teacher to student? (4) What is reciprocal teaching and how does it work in teacher training and in the classroom?

Module 5: Formative Assessments. In contrast to common assessment procedures ('assessment of learning', summative assessments), this module focuses on 'assessments for learning' (formative assessments). The function of these assessment procedures is helping teachers in supporting their students' learning. Main questions are: (1) Why is formative assessment an assessment for instruction? (2) What should be formatively assessed in the content area classroom? (3) How can vocabulary self-assessment be used by teachers in order to inform instruction? (4) What is the Content Area Reading Inventory (CARI) and how can it be designed by teachers to give clear instructional directions?

Module 6: Lesson Planning II – Creating Actual Lesson Plans. This module focuses on two topics: (a) Reflection and evaluation of lesson planning examples teachers have developed during the former modules. (b) Planning and reflecting the conditions for successful

implementation of the BaCuLit program in the teachers' own schools. Main questions are: (1) How did I embed the BaCuLit cross-curricular concepts and the framework for lesson planning in my own lesson planning? How did it work out for my students? (2) How can I embed concepts and elements of the BaCuLit course in my own personal action plan to sustain BaCuLit concepts in my future teaching? (3) What did I like about the whole course? Which improvements would I suggest?

The following outcomes have been produced within the BaCuLit project: PPT-presentations for all modules which also contain annotations for the trainers; a teacher workbook with all worksheets, materials and assignments for the participants, a handbook for the BaCuLit trainers, guidelines for professional development of teachers which explain our didactical approach, and a communication platform for teachers and trainers. We also created a BaCuLit website where you can find more information about the project, including PPTs, posters and flyers with basic information and module No. 1 with all materials in different languages (www.baculit.eu).

The BaCuLit Lesson Planning Framework

During the first project phase the BaCuLit consortium developed a complex model of content area literacy instruction, the so-called COME-model. The acronym C-O-M-E represented the main teaching activities 'Connecting students with content and text' – 'Organising, modelling, and controlling text comprehension' – 'Meaning negotiation and metacognitive reflection' and 'Expanding knowledge'. During the pilot teaching however, it turned out that this model was too complex and therefore caused more confusion than orientation among the course participants. At the Cologne Workshop the BaCuLit partners worked on a revision and – above all – simplification of the COME-model. We decided to entirely focus on the teacher's activities and to omit the students' perspective in this model; therefore it is now called the BaCuLit "Lesson Planning Framework".

² The main author of this model was our highly appreciated colleague and co-coordinator Karl Holle, who sadly passed away in 2013.

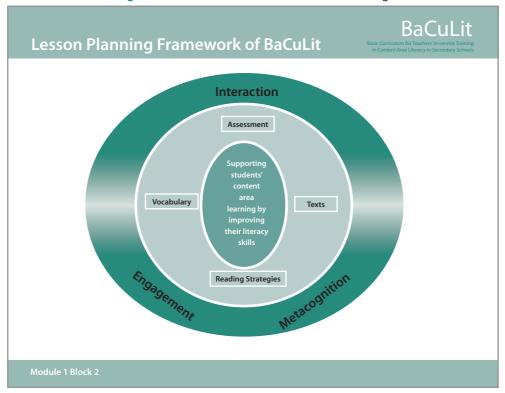


Figure 2. BaCuLit Framework for Lesson Planning

The BaCuLit Lesson Planning Framework is based on the ADORE Reading Instruction Cycle. The main goal of all lessons designed according to the BaCuLit framework is to support students' content area learning by improving their literacy skills, as is indicated in the ellipse in the middle. Although the focus of the model is on the teacher's perspective, the students' perspective is included in this inner circle as the BaCuLit goal. The second circle shows the core concepts, which are dealt with in separate modules in the BaCuLit curriculum: texts (module 2: Text organisation and text diversity), reading strategies (module 4: Teaching cognitive and metacognitive reading strategies), vocabulary (module 3: Teaching academic vocabulary) and assessment (module 5: Formative assessment for content literacy and learning). The outer circle includes the cross-curricular concepts which should be part of every module (and every BaCuLit lesson). These three concepts - metacognition, interaction and engagement - are therefore introduced in the basic module No. 1 (in block 2). Also in module 1 the participants get to know the "Guiding Questions for Lesson Planning" which refer to the Lesson Planning Framework. They contain 3 to 5 questions in each of the following paragraphs which are worked through in all 6 modules, thus enabling teachers to internalize these principles and apply them in their daily classroom practice:

BaCuLit Guiding Questions for Lesson Planning:

SUPERIOR TOPICS and LEARNING GOALS of my LESSON / UNIT

What are my goals for this lesson with respect to content and literacy learning?

What content is central to this unit? What do I expect students to know and do as a result of this unit?

What instructional materials will I select to meet these learning expectations? If a fixed unit is used: how does text play a role in this unit?

ENGAGEMENT

How can I find out what students want to know about the topic in order to engage them in learning?

How can I have them participate in choosing learning materials for this unit and setting up learning goals for their individual learning?

How can I actively involve every student in the learning process?

INTERACTION

How much modelling from my part will be necessary for students to use the strategies I want to include in this lesson?

Which kind of support and scaffolding activities do I have to provide for students' learning of this content?

How can I arrange a maximum of participation and interaction among students?

METACOGNITION

How can I help students understand the importance of activating their own background knowledge?

How can I help them focus on the learning tasks and setting their own learning goals? How can I help students continually monitoring their own comprehension?

What opportunities will students have to fix up areas of misunderstanding in order to perform well on the tasks and the final assessment?

How will I provide students with opportunities to evaluate and reflect about their learning?

TEXTS

What are the characteristics of the specific text (I chose / we chose) and of this text genre in general?

Which challenges (in structure, content and vocabulary) does this text contain for my students and how can I make it accessible to them? Is this text in their "zone of proximal development"?

What are the big ideas in this text? How are they conceptually related? How are they related to the content of previous lessons?

VOCABULARY

How do I build understanding of essential vocabulary?

How do I select words that are essential for students to learn in my content area?

What strategies will I use to create students' ownership of important vocabulary?

READING STRATEGIES

How can I model and scaffold the use of strategies *before – during – after reading* in order to better understand this particular text?

What tools shall students use for structuring the content of this text during and after reading (e.g., selective underlining, summarising, concept maps, Venn diagrams, tables, time relations, two column notes...)?

What strategies will I offer my students to become actively persistent while reading?

ASSESSMENT

How can I assess my students' literacy abilities and strategies with my content texts? How can I assess my students' knowledge of key concepts and vocabulary from my content texts?

How can I use these assessments to provide responsive content literacy instruction? How can I help my students monitor their progress as readers and thinkers of my content texts?

Which assessment information will I provide to students so they know what is expected of them?

In the "Conceptual Foundations" for Module 1 in the Trainers' Handbook background information can be found about the research basis of our framework; we refer to John Hattie's study "Visible Learning" from 2009 which is considered as a milestone in international empirical education research, to international research about teachers' PD (e.g. Timperley, 2008) and to several excellent PD-programs in the United States, above all "Reading Apprenticeship" (Schoenbach et al., 2012) and "Project CRISS" (Santa et al., 2014).

BaCuLit Principles for Professional Development and Working Methods

Teachers' PD treats teachers as learners. The ultimate goal underlying teachers' PD is improved student learning. Research shows that teachers feel motivated to learn only if their learning makes a difference to their students' learning. The question directing professional learning is "What works best and why?" (cf. Hattie, 2009; Timperley, 2008).

BaCuLit aims at enhancing teachers' expertise in content area literacy. As international research has shown, so-called "one-shot training activities" are not enough to actually change classroom practice but instead may lead to a "knowledge-action-gap" (see, for example, Anderson, 1992; Garbe, 2014; Philipp & Scherf, 2012; Scherf, 2013). BaCuLit therefore offers a flexible curriculum (tailored programmes) that can be used on a long term basis for inservice training. Instead of relying on a concept of PD that only presents information, the BaCuLit project relies on principles of teaching and learning that have a positive influence on teachers' self-concept as competent and reflective practitioners. Teaching students how to learn content by reading and writing, talking and listening must go hand in hand with content instruction, so that students gain the tools for life-long learning. Content teachers should not only be content specialists but learning specialists. When students know how

they can use reading and writing for learning content they become more successful learners which leads to feelings of success for both teachers and students.

Following this understanding of effective PD for in-service teachers of all content areas in order to change classroom practice, we designed the BaCuLit workshops according to the following principles:

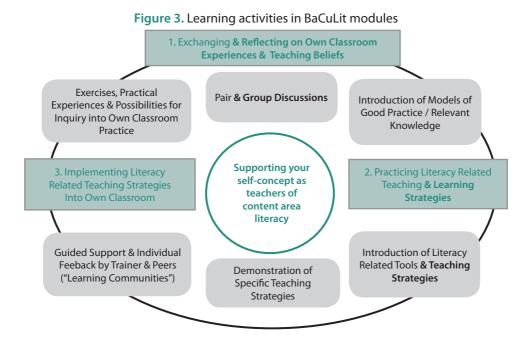
- We give teachers the opportunity to interact with each other to exchange and reflect on their own classroom experiences in their disciplinary subjects and their teaching beliefs.
- We allow teachers to practice new literacy related teaching and learning strategies within the courses because research has shown that teachers only apply in their classrooms what they have experienced themselves.
- We offer teachers guided support and feedback in adapting literacy practices to their own content area classrooms.

These principles of PD guide the following learning activities that are used in the workshops:

- having pair and group discussions during the workshops
- providing peer and trainer support and individual feedback during the workshops and via communication platform (building "learning communities")
- introducing relevant knowledge as well as models of good practice and offering opportunities to link this knowledge and these models to the teachers' own classroom practice
- introducing literacy related tools and teaching strategies
- offering demonstrations of specific teaching strategies
- offering exercises, practical experiences, and possibilities for inquiry into teachers' own classroom practice.

In order to incorporate these principles for PD in the BaCuLit course we designed the *Teachers' Workbook* as an important tool. This workbook offers materials and methods which are designed to support teachers' efforts to change their classroom practice. It contains background information, assignments for homework, tools for applying inquiry methods to the classroom, assessment tools and evaluation sheets. The Teacher Workbook also functions as a portfolio where course participants document their active participation and work with the course materials; completing the assignments is a prerequisite for getting the BaCuLit certificate at the end of the course.

Figure 3 shows the principles according to which every module has been developed. The main idea is to strongly reflect on the teachers' own classroom experiences and teaching beliefs in every module and to give them the opportunity to get a clear idea of the principles their own teaching is based on. The relevant literacy knowledge is related to outcomes of literacy and instructional research, but these outcomes are transformed into models of good practice and practical approaches of literacy related teaching and learning strategies. The goal is that at the end of each module teachers are aware of routines and teaching strategies they can use and try out in their daily instruction.



Evaluation Tools for evaluating the Pilot Courses during the Implementation Phase of the BaCuLit curriculum

In the implementation phase of the BaCuLit course in all participating countries the drafted modules were translated into the national languages and taught to a pilot teachers' cohort of 10 to 20 teachers in each of the 7 teacher training institutions. During this implementation phase the developing and implementing BaCuLit teams evaluated the practicability of the BaCuLit course in the diverse European countries which were part of the project. This evaluation was designed according to the evaluation concept agreed upon by the partners on the 2nd BaCuLit workshop in September 2011 in Braga.

The following tools and methods for evaluating the implementation of the BaCuLit concept and curriculum were worked out for this evaluation:

- (1) Evaluation Tools for the Implementation of the Modules (teachers & teacher trainers)
 - ► *Evaluation sheets*, which were filled in by every teacher after the completion of each of the six modules
 - ► Teacher workbooks and entries on the online communication platform ("Moodle"), which were analysed by the national teams to evaluate the implementation phase. To ensure some kind of comparison, guidelines were provided by the Coordinating Team on how to evaluate these materials.
 - ▶ **Documentation of and reflection on the teaching of the modules** by the teacher trainers, which was realised by a semi-structured Trainers' Questionnaire Form (to be filled in every time after teaching one module).

(2) Evaluation Tools for the Tandem Visits

These tools were used by different persons involved in the tandem visits during the implementation phase: External experts, national developers and teacher trainers from other countries.

- ► *Observation sheets*, which were filled in by the external experts and national developers during the observation of the module teaching
- ► *Guidelines for interviewing trainers and teachers*, which was done by the national developers (due to language restrictions)
- ▶ *Short guidelines for group discussions with course participants*, which were conducted by the external experts or the national developers.
- Report Forms for the reports of external advisors from national education policy
- ► **Report Forms for the reports of the national developers**, which consist of a summary of their observations, interviews and the group discussion.

All evaluation tools for the implementation of the modules and the tandem visits of external experts, national developers and teacher trainers from different countries have been developed and were used during the implementation phase. These tools have been published on the project website and are thus available for similar projects and initiatives.

The ISIT Project

The ISIT project ("Implementation Strategies for Innovations in Teachers' Professional Development") was funded within the COMENIUS Accompanying Measures programme and run for 15 months (12/2013 – 02/2015). The project built upon the results of the BaCuLit project and comprised BaCuLit partners from Germany, Hungary, Portugal and Romania and new partners from Belgium, Cyprus, Finland, and Russia (the latter on a self-paying basis). During the last phase of the BaCuLit project the implementation opportunities for the BaCuLit curriculum in the 7 participating countries were analysed in so called mainstreaming reports (carried out by national experts). Germany, Hungary and Romania revealed the most promising opportunities to implement the BaCuLit curriculum within a narrow time-frame. Besides this, the 3 countries represented different approaches to CPD and diverse structures (central, federal, regional), so that a comparative analysis of implementation strategies promised to deliver rich insights.

In addition to the 6 core partners from these three countries the coordinator decided to involve further "associated partners". Even though ISIT was implemented only in the above mentioned 3 countries, some previous partners from the ADORE project (Belgium, Finland) and some new partners (Cyprus, Russia) were interested in learning about the BaCuLit curriculum and participating in the research about implementing innovative concepts into national CPD systems. They all are leading pedagogical institutions in their countries, and are highly involved in research and transfer of innovative concepts into teachers' CPD.

We chose those institutions to become partners during the implementation phase of ISIT in order to reach a better geographical coverage across Europe: involving additional partners from the Northern (Finland), Western (Belgium), Eastern (Russia) and Southern parts of Europe (Portugal, Cyprus) and to involve a multitude of heterogeneous countries,

some of them facing heavy economic crises (like Portugal, Cyprus and Greece), others representing the wealthier parts of Europe (like Germany, Belgium and Finland); some of them representing the new member states (Hungary, Romania).

Project Design and Objectives

The ISIT project addressed two problems defined by the EU Education and Training Benchmarks for 2020 and by the Final Report of the High Level Group of Experts on Literacy (2012): (1) the problem of low literacy skills of students in many European countries which became obvious with the PISA studies and (2) the unsatisfying status of teachers' continuous professional development (CPD) in the EU.

In order to address the problem of low literacy skills of European adolescents the previous BaCuLit project developed a comprehensive curriculum in content area literacy (CAL) for continuous professional development of secondary teachers. In ISIT, we considered this curriculum to be a model of an *innovative training programme* for teachers which allows for flexible adoption to specific national or local requirements, programmes and time frames.

Several European reports revealed unsatisfying conditions of teachers' in-service training in European countries on a general level, but they do not provide advice for the central question of this project: Which strategies for the *implementation of innovations* are suitable for the different educational systems in European countries? As to this question ISIT intended to gain more specific qualitative data in a process that closely links research to practice, similar to the principles of action research: *not* to separate research from action (change, innovation) and likewise *not* to separate researchers from actors.

Building upon the results of the *innovative CPD programme of BaCuLit*, the ISIT project thus pursued two goals: (1) training at least 30 teacher educators from 3 European countries in content area literacy (specific goal) and (2) identifying the most successful methods of how to implement innovations into different national structures of CPD (general, comparative goal).

The project addressed 3 target groups: by training teacher educators working in teachers' in-service training institutions (narrow target group) it reaches out to secondary school teachers (second target group) which will have a positive impact on the long-term target group of secondary students with low literacy skills (broadest target group).

In fact, ISIT trained a total of 34 teacher educators from 28 different training institutions of Germany, Hungary and Romania to become CAL-trainers by means of an e-Learning course (on the platform ITSLearning, www.itslearning.com) and a one-week International Summer School in August 2014. After being trained and certified as BaCuLit trainers the teacher educators explored the opportunities of regular sustainable implementation of CAL courses in their training institutions and documented the steps taken in an implementation logbook. In national workshops the trained teacher educators analysed together with national ISIT staff members the steps and obstacles in implementing CAL courses in their institutions. Thus, ISIT explored the general opportunities and obstacles in implementing innovation into teachers' CPD in the three countries. The ISIT design is based on the

assumption that experiences with implementing CAL are valid and helpful also for other kinds of innovation. Thus they can be used by all actors who want to implement new methods, materials or subject-related topics into CPD.

A further objective was the dissemination of BaCuLit (or adapted CAL courses) in five additional European countries. Although the project focused on three countries, partners from 5 other countries participated in the Summer School and in the final project workshop in order to gain new and comparative insights and to give input and advice from the perspective of their countries.

Implementation Strategies for Innovations in Teachers' Professional Development – Findings from the ISIT Project

In three national workshops in the implementing countries and one international workshop with all partners the implementation logbooks of 30 trainers have been analysed in order to identify successful implementation strategies for innovative CAL-courses in the participating teacher training institutions.³ The ISIT-consortium could identify some common (transnational) and/or specific (national) *obstacles* as well as *opportunities* for implementing CAL-courses in the participating countries and developed some general and specific *recommendations* addressing teacher trainers, training institutions and policy makers. We will report here only the common obstacles which were identified in all three implementing countries.

Obstacles for implementing CAL-courses in teachers' CPD

Lack of time
In all implementing countries the lack of time for participating in PD turned out to be a major obstacle. The full BaCuLit course comprises 6 modules of minimum 6 hours each and consequently requires a long-term commitment of teachers (and principals) to attend those courses for a period of ideally 6 or more months. As schools have to invest into substitution of teachers during their absence due to training programmes, principals show reluctance to allow teachers such long-term participation in PD during school hours. Possible solutions proposed by the ISIT trainers are for example an 'appetizer strategy' which offers a small unit of the BaCuLit course, e.g. a "one afternoon demo version" in order to get teachers interested for learning more. Other possibilities would be a blended version of weekdays and Saturdays or weekdays and summer schools or a blended learning course combining face-to-face with e-learning units. On the political level the conditions for teachers' CPD have to

The results of the national workshops and the analysis of the national implementation logbooks have been summarised in the national ISIT Reports about Germany (author: Dorothee Gaile), Hungary (author: Ildikó Szabó) and Romania (author: Ariana-Stanca Vacaretu) which can be downloaded from the ISIT website.

be improved: teachers should be given the opportunity to regularly participate in in-service training and they should be held accountable for doing so.

- Qeographical conditions
 In some implementing countries the size of regions to be covered by PD offers is an additional challenge. Teachers who have to travel 200 km to the training institution will not commit themselves to attend a course for 6 or 12 units. Two solutions have been taken into account: the teacher trainers have to travel to the schools (in case of whole-staff-training) or the course has to be offered as a blended-learning course.
- Reluctance of teachers and/or principals
 In all participating countries teachers or principals showed some reluctance to "innovative" offers in CPD. Too often they have been disappointed by CPD courses with attractive titles but no interesting content for their daily practice; or they were obliged by top-down-decisions to attend courses which did not meet their needs. Possible solutions: to take care of high quality offers and continuous quality monitoring; to build teachers' confidence into the quality of the BaCuLit offers on a long-term basis and to strive for scientific evaluations which prove the positive effects of the programme.
- Literacy not being prioritised on the educational agenda/rapid institutional changes In all participating countries there is a lack of awareness for the importance of content area literacy and the required qualifications for teachers of all subjects. The educational agendas and topics as well as the involved teacher training programmes and institutions change in accordance with political changes (e.g. due to elections) and often do not allow for the necessary continuity of educational reforms. Possible solutions have to build on continuous awareness raising measures about the importance of literacy issues like those being initiated by the Literacy Report of the European High Level Expert Group (2012) or the European Network of Literacy Organisations (www.eli-net.eu) being established in 2014.

Successful Implementation Strategies for CAL courses

The newly certified BaCuLit trainers in Germany, Hungary and Romania developed different strategies for implementing CAL-elements into their regular PD-practice. Without any exception the qualified trainers who filled in the logbooks displayed a high degree of engagement looking for solutions and paths towards the implementation of the programme. The measures initiated by them were carefully adapted to the conditions of the respective country or region and they witnessed a high amount of creativity. On a general level, the following key success strategies could be identified:

Implementing the programme in several phases of teacher education
In one German federal state the BaCuLit course was developed as a certified additional qualification for teacher trainees. At the same time BaCuLit modules are offered in inservice training and opportunities are currently being explored to offer content area literacy seminars in initial teacher education at the University as well. In Hungary, several modules

of the BaCuLit curriculum have been implemented in the study programme of initial teacher education in one Teacher Training College.

- Implementing the programme step-by-step
 In several institutions a systematic step-by-step planning of implementation on different levels within relevant institutions was performed. Careful information of decision-makers at teacher training institutions turned out to be a key success factor for sustainable implementation of the programme. "As communication had always accompanied the process, there were no barriers to the implementation of BaCuLit", one trainer wrote.
- Integrating BaCuLit into existing literacy programmes
 In all countries attempts have been made to integrate BaCuLit elements into existing programmes or initiatives. In Hungary the national initiative to develop a new generation of textbooks for all school subjects has been used to integrate content area literacy elements and assignments into those textbooks; in Germany national or federal literacy programmes and the respective structures (ProLesen, BISS: Bildung in Sprache und Schrift, "Lesen macht stark") have been addressed; in Romania curriculum reforms and national assessments are taken into account for implementing CAL elements.
- Self-qualification of new trainers
 Several trainers asked themselves how they can gain the necessary expertise as
 BaCuLit facilitators. They decided to first put parts of the programme to the test in their
 own teaching practice (in the schools or teacher seminars where they work) and thus
 gained experience and self-confidence in their role as a BaCuLit trainer. They kind of 'selfscaffolded' their own learning process by asking themselves questions that can be followed
 in their logbooks. Only in a subsequent phase did they implement their BaCuLit elements in
 their role as teacher trainers.
- Applying an 'Appetizer' Strategy

 Several trainers discovered the opportunity of offering "mini-training sessions" with characteristic BaCuLit elements to colleagues and clients in order to create an 'appetite for more'. For example, they offered a two- or three-hours unit on "Modelling and Thinking Aloud" or on "Teaching Academic Vocabulary". Those mini lessons turned out to be highly effective.
- Tailoring the programme to existing demands
 Innovative PD programmes have to be designed in a way which allows for flexible adaptation to different needs, e.g. according to the needs of teachers of different levels (primary/secondary schools) or different types of schools, e.g. high schools or vocational schools. For example, a CAL-course "light" for in-service vocational teacher training and for CPD on natural sciences was found to be the most suitable format in one federal state of Germany.

- Networking
 An essential element for successfully implementing innovations into teachers' PD is building cooperations and networks between different institutions or organisations. In Romania, several Teacher Training Houses developed a cooperation in order to get the BaCuLit course accredited; Filocalia Foundation Iasi and RWCT Cluj came together to exchange their concepts and expertise. In Hungary, a national BaCuLit Association has been built up as part of the Hungarian Reading Association. In Germany, several trainers from different federal states decided to cooperate in order to develop additional modules for the BaCuLit course, e.g. an additional module on "BaCuLit for students with migration background/with German as a second language" and to produce synergies between fields.
- Accreditation

 Depending on national conditions the accreditation of BaCuLit courses turned out to be essential (like in Hungary and Romania). In those cases teacher training institutions started to cooperate in order to share resources and responsibilities for such accreditation.
- Whole staff approach and mentoring programmes
 Several trainers recommended the training of the whole staff of a school as an optimal way to put the BaCuLit programme into practice. However, this could be realised only in the case of one Romanian partner (from Iasi) who developed this concept for 30 schools of 6 counties in the frame of a national programme ("Reading to Learn"). Within this programme, the BaCuLit trainers also offer continuous mentoring for the teachers who are trained in the participating schools. This is felt to be the most effective way to implement CAL into the daily classroom practice of teachers, but it needs according personal and financial resources in order to be put into practice.
- 10. Combining top-down and bottom-up approaches
 Ideally, innovations in teachers' PD need a combination of top-down and bottomup approaches on school, local or national levels. Policy makers, curriculum designers or
 school principals have to provide the necessary legal and financial resources which enable
 teachers to participate in innovative courses. Those courses will on the other hand only
 create change in school and classroom practice if the teachers themselves are motivated and
 engaged in putting educational school programmes into practice.

Outlook and Future Perspectives

The ISIT project has just been finished and its results have to be disseminated now. The BaCuLit Association has more than 50 members in the meanwhile, most of them being certified BaCuLit trainers, and held its 3rd Annual Membership Meeting during the 19th European Conference on Literacy in Klagenfurt in July 2015. The coordinator of BaCuLit and ISIT (University of Cologne) has applied for a new project within the Erasmus+ programme (Key action 2: Cooperation for innovation and the exchange of good practices) which has just recently been approved: The "BleTeach" project (Blended Learning in Teachers' Professional Development) intends to develop a blended learning course in content area literacy for secondary teachers building on a careful investigation of international best practice in this field. The BleTeach consortium consists of 8 partner institutions working in six different countries (Belgium, Germany, Hungary, Portugal, Romania and Russia) and will continue the important work which has begun with the ADORE project.

Further information on BaCuLit is available on the project's website: http://www.baculit.eu

Further information on ISIT is available on the project's website: http://www.isit-project.eu

REFERENCES

- Anderson, V. (1992). A Teacher Development Project in Transactional Strategy Instruction for Teachers of Severely Reading-Disabled Adolescents. In: *Teaching and Teacher Education*, 8 (4), 391-403.
- Brozo, William G. (2014). Content Literacy in the United States Looking back and Seeing Forward. Presentation given at the ISIT International Summer School in Bad Ebernburg, August 2014. Retrieved from http://www.alinet.eu/index.php?option=com_content&view=article&id=125&Itemid=206)
- Collins, A., Brown, J. S. & Newman, S. E. (1989). Cognitive Apprenticeship: Teaching the Craft of Reading, Writing, and Mathematics. In: L.B. Resnick (Ed.). Knowing, Learning and Instruction: Essays in Honour of Robert Glaser. Hillsdale: Erlbaum, 453–494.
- Duke, N. & Pearson, P. D. (2002). Effective practices for developing reading comprehension. In: A. Farstrup & J. Samuels (Eds.). What Research has to say about reading instruction. Newark, DE: International Reading Association, 205-242.
- European Commission (2012): EU High Level Group of Experts on Literacy. Final Report, September 2012. Luxembourg: Publications Office of the European Union. Retrieved from http://ec.europa.eu/education/policy/school/doc/literacy-report_en.pdf
- Eurydice (2011). Teaching Reading in Europe, Contexts, Policies and Practices. Education, Audiovisual and Culture Executive Agency. http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/130en.pdf
- Garbe, C., Holle, K. & Weinhold S. (Eds.) (2010a). ADORE Teaching Struggling Adolescent Readers in European Countries. Key Elements of Good Practice. Frankfurt/Main: Peter Lang.
- Garbe, C., Holle, K. & Weinhold S. (2010b). ADORE Teaching Adolescent Struggling Readers. Ein europäisches Forschungsprojekt über gute (Unterrichts-)Praxis zur Förderung leseschwacher Jugendlicher. In: *Didaktik Deutsch*, 28, 75-97.
- Garbe, C. (Ed.) (2013). Basic Curriculum for Teachers' In-Service-Training in Content Area Literacy in Secondary Schools. Handbook for Trainers. University of Cologne, BaCuLit Association.
- Garbe, C. (2014). BaCuLit Ein europäisches Kerncurriculum zur Vermittlung fachspezifischer Lese- und Schreibkompetenzen. In: Valtin, R., Tarelli, I. (Eds.). *Lesekompetenz nachhaltig stärken. Evidenzbasierte Maßnahmen und Programme*. DGLS-Beiträge Vol 16, Berlin: DGLS, 247-275.

- Hattie, J.A.C. (2009). Visible Learning: A Synthesis of over 800 Meta-Analyses Relating to Achievement. London & New York: Routledge.
- Lankes, E. M. & Carstensen, C. H. (2007). Der Leseunterricht aus der Sicht der Lehrkräfte. In W. Bos, S.
 Hornberg, K.-H. Arnold, G. Faust, L. Fried, E.M. Lankes, K. Schwippert, & R. Valtin (Eds.). IGLU 2006
 Lesekompetenzen von Grundschulkindern in Deutschland im internationalen Vergleich, S. 161–193.
 Münster: Waxmann.
- Mikulecky, L. & Drew, R. (1991). Basic Lieracy Skills in the Workplace. In: Kamil, M.L. et al. (Eds.). *Handbook of Reading Research*. Vol. 2, New York: Longman, 669-689.
- Mohan, L., Lundeberg, M. A., & Reffitt, K. (2008). Studying Teachers and Schools: Michael Pressley's Legacy and Directions for Future Research. In: *Educational Psychologist*, 2, 107-118.
- Mullis, I. V. S., Martin, M. O., Foy, P. & Drucker, K. T. (2012). *PIRLS 2011 International Results in Reading*. Chestnut Hill, MA: TIMSS & PIRLS International Study Center, Boston College.
- Nugent, G., Malik, S. & Hollingsworth, S. (2012). A practical guide to action research for Literacy educators, p. 4. Retrieved from http://www.literacyworldwide.org/docs/default-source/resource-documents/a-practical-guide-to-action-research-for-literacy-educators.pdf?sfvrsn=4
- OECD (2005). Teachers Matter: Attracting, Developing and Retaining Effective Teachers Final Report. Paris: OECD Publishing. Retrieved from http://www.oecd.org/edu/school/attractingdevelopingandret ainingeffectiveteachers-finalreportteachersmatter.htm
- OECD (2013). Teaching and Learning International Study (TALIS) Results: An International Perspective on Teaching and Learning. Paris: OECD Publishing. Retrieved from http://www.oecd.org/edu/school/talis. htm.
- Philipp, M. & Scherf, D. (2012). Die zentrale Bedeutung der Lehrkraft für die Vermittlung selbstregulierten Lesens. In: M. Philipp & A. Schilcher (Ed.). Selbstreguliertes Lesen. Ein Überblick über wirksame Leseförderansätze, Seelze: Kallmeyer/Klett, 226-242.
- Pressley, M., Gaskins, I., Solic, K. & Collins, S. (2006). A Portrait of Benchmark School: How a School Produces High Achievement in Students Who Previously Failed. *Journal of Educational Psychology*, 98 (2), 282-306.
- Pressley, M., Mohan, L., Raphael, L. M. & Fingeret, L. (2007). How Does Bennett Woods Elementary School Produce Such High Reading and Writing Achievement? *Journal of Educational Psychology*, 99 (2), 221-240.
- Pressley, M., Raphael, L., Gallagher, J. D. & DiBella, J. (2004). Providence-St. Mel School: How a School That Works for African American Students Works. *Journal of Educational Psychology*, 96 (2), 216-235.
- Santa, C., Havens, L., Franciosi, D. & Valdes, B. (2012). *Project CRISS. Helping Teachers Teach and Learners Learn*. 4th edition. Kalispell, MO: Kendall Hunt.
- Scherf, D. (2013). Leseförderung aus Lehrersicht. Eine qualitativ-empirische Untersuchung professionellen Wissens. Wiesbaden: Springer VS.
- Schoenbach, R., Greenleaf, C. & Murphy, L. (2012). Reading for Understanding: How Reading Apprenticeship Improves Disciplinary Learning in Secondary and College Classrooms, 2nd edition. San Francisco: Jossey-Bass.
- Strickland, D., & Kamil, M. (Eds.). (2004). Improving Reading Achievement through Professional Development. Norwood, Massachusetts: Christopher-Gordon Publishers.
- Sulkunen, S. (2013). Adolescent Literacy in Europe An Urgent Call for Action. European Journal of Education, 48(4), 528-542.
- Timperley, H.S. (2008). A Distributed Perspective on Leadership and Enhancing Valued Outcomes for Students. *Journal of Curriculum Studies* 40(6) 821-833.
- Vygotsky, L. S. (1978). Thought and Language. Revised Edition. Cambridge: MIT PRESS.